

B1

--In this example, however, the quantization step size is set to control the bit count per unit time to be constant independently of input images. Therefore, in a scene requiring many bits, the image quality is degraded, because the generated bits are suppressed by a large quantization step size.--

Please replace the paragraph beginning on page 9, line 26, with the following rewritten paragraph:

B2

--According to the present invention, there is provided an apparatus for variable bit rate video coding of video data on the basis of a predetermined average bit rate comprising: a video coding means for coding input video with a predetermined quantization step size and providing coded data and a generated code bit count; a quantization step size setting means for setting a reference quantization step size for each first image unit, corresponding to an average bit rate, from the predetermined average bit rate, the quantization step size provided to the video coding means and also the generated code bit count; and a quantization step size adjusting means for calculating the average bit rate from the generated code bit count and for adjusting the quantization step size provided from the quantization step size setting means for each second image unit from the generated code bit count provided from the video coding means and also from a bit balance of the generated code bit count with respect to the average bit rate.--

Please replace the paragraph beginning on page 12, line 23, with the following rewritten paragraph:

B3

--The quantization step size adjusting means for adjusting the quantization

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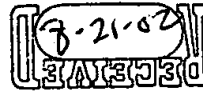
B3

step size for each second image unit preliminarily sets a threshold for quantization step size, when the bit balance of the generated bit count with respect to the average bit rate is not excessive, the reference quantization step size set for each first image unit is compared with the threshold for quantization step size, for providing the quantization step size without any adjustment when the reference quantization step size is not exceeding the threshold quantization step size, and adjusting the quantization step size according to the bit balance to the average bit rate and selectively providing the greater one of the adjusted quantization step size and the threshold for quantization step size, and when the bit balance of the generated bit count with respect to the average bit rate is excessive, the quantization step size is adjusted according to the bit balance to the average bit rate, the adjusted quantization step size being provided as the quantization step size for each second image unit.--

Please replace the paragraph beginning on page 13, line 14, with the following rewritten paragraph:

B4

--According to the present invention, there is provided a method of variable bit rate video coding of video data on the basis of a predetermined average bit rate comprising: a video coding step of coding input video with a predetermined quantization step size and providing coded data and a generated code bit count; a quantization step size setting step of setting a reference quantization step size for each first image unit, corresponding to an average bit rate, from the predetermined average bit rate, the quantization step size provided to the video coding step and also the generated code bit count provided therefrom; and a quantization step size adjusting step of



By calculating the average bit rate from the generated bit count and of adjusting the quantization step size provided from the quantization step size setting step for each second image unit from the generated code bit count provided from the video coding step and also from a bit balance of the generated bit count with respect to the average bit rate.--

Please replace the paragraph beginning on page 15, line 2, with the following rewritten paragraph:

By --The quantization step size setting step of setting the reference quantization step size for each second image unit includes a step of computing a first quantization step size by adjusting the quantization step size for each second image unit from the generated code bit count provided from the video coding step and the bit balance of the generated bit count with respect to the average bit rate; and in the computing step, a maximum bit rate is set, a second quantization step size is computed, which is set in the case of fixed bit rate control on the basis of the maximum bit rate, from the quantization step size set in the quantization step size setting step and the generated code bit count provided from the video coding step, and the greater one of the first and second quantization step sizes is provided to the video coding step.--

Please replace the paragraph beginning on page 16, line 12, with the following rewritten paragraph:

By --In the quantization step size adjusting means of adjusting the quantization step size for each second image unit, a threshold quantization step size is

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preliminarily set, when the bit balance of the generated bit count with respect to the average bit rate is not excessive, the reference quantization step size set for each first image unit is compared with the threshold quantization step size, for providing the quantization step size without any adjustment when the reference quantization step size is not exceeding the bit balance to the average bit rate, and adjusting the quantization step size according to the bit balance of the generated bit count with respect to average bit rate and selectively providing the greater one of the adjusted quantization step size and the threshold quantization step size, and when the bit balance of the generated bit count with respect to the average bit rate is excessive, the quantization step size is adjusted according to the bit balance to the average bit rate, the adjusted quantizing with being provided as the quantizing with for each second image unit.--

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Please replace the paragraph beginning on page 17, line 4, with the following rewritten paragraph:

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B7

--According to another aspect of the present invention, there is provided a method of variable bit rate video coding of video data on the basis of a predetermined average bit rate wherein quantization step size is set such as to hold a constant coded image quality level over a plurality of groups of picture images and the quantization step size is adjusted from a bit balance of a generated bit count with respect to an average bit rate with reference to the quantization step size that has been set as above.--

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Please replace the paragraph beginning on page 18, line 23, with the following rewritten paragraph: